

Remarks/Arguments

Claims 1-9 are pending.

Rejection of claim 2 under 35 USC 112, second paragraph

Responsive to the rejection of claim 2, Applicants have amended claim 2 to replace the term "any" with "transmission."

Rejection of claims 1-9 under 35 USC 103(a) as being unpatentable over Smyers et al. (WO 98/4727A1) and Simms et al (US 6,161,155).

Applicants submit that for the reasons discussed below present claims 1-9 are patentably distinguishable over the combination of Smyers and Simms.

The present invention relates to a method for management of data received via a serial bus. In particular, the invention provides a method for ascertaining at a receiver device the start and the end of a data source packet transmitted in fragments. The invention achieves this object by carrying out a modulo-n counting of the data blocks and signals the beginning of a new data source packet at the beginning of the respective next time interval of modulo-n counting. In that regard, amended claim 1 recites:

carrying out a modulo-n counting of the data blocks in order to determine the data source packet boundaries, and in that the beginning of a new data source packet is signaled to a memory management device at the beginning of the next counting interval.

Applicants submit that nowhere does the combination of Smyers et al. and Simms et al. teach or suggest this feature.

The Office Action states that Smyers et al. discloses sending isochronous data as data source packets to form bus packets from these source packets and allows sending the bus packets in variable length. However, Applicants are unable to find any teaching in the cited portions of Smyers et al. in this regard. Specifically, Applicants are unable to find any teaching of sending data in source packet form with a dedicated number of data blocks in one source packet, the source packets being sent in bus packets where the bus packets are allowed to have variable length (a variable number of data blocks).

The only teaching Applicants have found in this regard is page 6, lines 11-15, where it is explained that a packet is formed in the form required by bus structure 58. This may be interpreted as a bus packet. However, nowhere does Smyers et al. explain that the bus packet may have variable length and that it may be made up of a variable number of data blocks. Smyers is also silent as to source packets and their format (they are made up of a fixed number of data blocks). Indeed, Applicants are unable to determine that Smyers is specific to the problem of how to reliably and easily find data source packet boundaries in this particular transfer mode.

In any event, the Office Action acknowledges that Smyers et al. fails to disclose "... the data being divided into data block having a defined length and modulo-n counting of the data blocks is carried out in order to determine the data source packet boundaries and in that the beginning of a new data source packet is signaled to a memory management device at the beginning of the next count interval." Simms is cited as teaching this feature.

At the outset, Applicants note that Simms is directed to a SCSI interface (col. 1, lines 21-47; col. 2, lines 5-6). The present claims have been amended to recite receiving data over a serial bus.

The method of determining the boundary indicator according to Simms et al. is distinguishable over the method recited in the present claims. In order to set up a block transfer, the host computer communicates a number of parameters to a storage device. One parameter is the number of data packets that will be transmitted during the block transfer (see col. 3, lines 45-51). Upon receiving the parameter, the receiving device set a counter 6 according to the received parameter (col. 3, lines 51-54). As the host transfers the data blocks, the counter is decremented each time a data packet is received, and it is checked if the count value has gone to zero. If so, the corresponding data packet is determined to be an EOB data packet (col. 4, lines 3-7).

Therefore, it can be seen that according Simms et al., the occurrence of the EOB data packet is determined **from the parameters transmitted by the host computer**. By contrast, according to the present invention, a modulo-n counting is carried out in the receiving end to find the source packet boundaries in the variable length bus packets. Unlike Simms, a parameter, such as that indicative of the

number of data packets to be transmitted, is not required to be transmitted to the receiver.

In view of the above, Applicants submit that Simms et al. fails to cure the defect of Smyers et al. with regard to the above-cited feature of claim 1. As such, Applicants submit that the combination of Simms et al. and Smyers et al. fail to teach or suggest a notable feature of amended claim 1, and that amended claim 1, and the claims that depend therefrom, are patentably distinguishable over the cited prior art references.

Having fully addressed the Examiner's rejections, Applicants submit that the present application is in condition for allowance and respectfully request such action. No fee is believed due in regard to the present amendment. However, if a fee is due, please charge the fee to Deposit Account 07-0832. Should any questions arise regarding any of the above, the Examiner is requested to contact the undersigned at 609-734-6815.

Respectfully submitted,
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